

**RIC 2002**  
**Session W6**  
**Reactor Oversight Process**

**SIGNIFICANCE DETERMINATION  
PROCESS**  
**Exelon's Perspective**

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# Overall Perspective on SDP:

- SDP has helped to educate both plant and NRC personnel on risk evaluation
- SPD has improved focus on risk significant issues
- SDP has provided a vehicle for communication
- SPD has required too much resources & time (especially low risk significance SDPs)
- SDP process deficiency corrections have not been timely
- SDP capability is highly variable among NRC staff

# Risk Significance of Findings In

- **Reactor Operation at Power (Reactor Safety)**
- Emergency Preparedness
- Occupational Radiation Safety
- Public Radiation Safety
- Physical Protection Safety
- **Fire Protection and Post-Fire Safe Shutdown**
- Shutdown Safety
- Containment Integrity
- Operator Requalification, Human Performance

# SDP Results In Reactor Safety:

- Well-founded on risk assessment fundamentals
- Excellent dialogue between Exelon and NRC during 2000 worksheet reviews and 2001 benchmarking
- Good communications with NRC Senior Reactor Analysts (SRAs) when needed
- NRC frequently applies SDP to issues, not just findings
- 2001 Revised SDP worksheets still contain a high degree of conservatism
- NRC SDP results are not completely communicated

# SDP Results in Fire Protection & Post-Fire Safe Shutdown (App. F):

- Provides an opportunity to assess risk realistically
- Generally structured like fire risk assessments
- Provides good contrast to deterministic approach
- NRC Inspectors have not been trained to develop realistic fire scenarios
- NRC applications continue to
  - Use fire protection assumptions
  - Produce extreme conclusions because unrealistic results are compared to realistic risk criteria

## Conclusion:

- SDP should be applied only to stated NRC findings which are fully defined.
- SDP evaluations should be as realistic as PRAs.
- NRC and utilities should exchange bases for SDP conclusions to make the process most effective.
- SDP "Regulatory Conferences" should be conducted as information exchanges, not like enforcement conferences.
- NRC should reduce conservatism in SDP Reactor Safety worksheets based on utility plant-specific PRAs.